

ZAKHARIEV, Vangel; MIKHOV, Mikho, inzh, khim.

Gluing of plywood sheets with jointing machines. Durvomebel
prom 6 no.3: 37-38 My-Je '63

1. N-k shperplaten tsekh, DIP "Tsv. Radionov", s. Gorno
Sakhrane, Starozagorski okrug (for Zakhariev). 2. N-k
laboratoria ot DIP "Tsv. Radionov", s. Gorno Sakhrane,
Starozagorski okrug (for Mikhov).

ZAKHARIEV, Vladimir

A very useful book for industrial enterprises: "Reserves for an increased labor productivity in industry" by G. Minchev, II. Pantev, and K. Kunchev. Reviewed by Vladimir Zakhariev. Trud tseii 4 no.2:66-68 '62.

ZAKHARIEV, V.

The north frontier of the Mediterranean climatic influence in the Struma River valley. p. 39

KHIDROLOGIJA I METEOROLOGIJA. (Ministerstvo ra zemedelieto. Khidrometeorologichna sluzhba) Sofia, Bulgaria, No. 5, 1959

Monthly List of East European Accessions (MEAI), IC, Vol. 8, No. 12,
December 1959
Uncl.

ZAKHARIEV, V.

A case of the application of smoke for preventing the blossoms of
fruit trees from freezing in the Kyustendil District. Khidro 1
meteorolog no.2:62-64 '61. (EEAI 10:9)

(Plants, Effect of temperature on)

L 14062-66 INT(1)/FCG ON
ACC NR: ATSU24812

UR/3118/65/000/016/0025/003:

35
33
BT1

AUTHOR: Zakhariev, V.I.; Codev, N.G.

ORG: World meteorological center (Mirovoy meteorologicheskii tsentr)

TITLE: Numerical approach to meteorological prognosis with a two layer atmosphere model on the basis of a solution of the full system of hydrodynamic equations

SOURCE: Mirovoy meteorologicheskii tsentr. Trudy, no. 6, 1965. Voprosy gidrodinamicheskogo kratkosrochnogo prognoza pogody i mezometeorologii (Problems in hydrodynamic short-range weather forecasting and mesometeorology), 25-32

TOPIC TAGS: weather forecasting, hydrodynamic theory, hydrometeorology, atmospheric geopotential, computer calculation, atmospheric model

ABSTRACT: A two level meteorological short term prognostic model has been constructed on the basis of a quasistatic atmosphere with adiabatic processes, and a plane surface of the Earth. The model utilizes the full system of hydrodynamic equations corresponding to these assumptions, which can be considered as a hydrothermodynamic system of equations. With the notations:

p - pressure; P - sea level standard pressure; Φ - geopotential; x, y, z - East and North and vertical axes; t - time; u, v, ω - wind velocity components; T - temperature; l - Coriolis parametr, R - Gas constant; g - acc. of gravity; γ_d - dry adiabatic grad.,

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γ - standard vertical temperature gradient; T_c - average air temperature - the system of hydrothermodynamic equations can be written down as follows:

$$\frac{\partial u \omega}{\partial \xi} = \frac{\partial u}{\partial t} + \frac{\partial u^2}{\partial x} + \frac{\partial uv}{\partial y} + \frac{\partial \Phi}{\partial x} - l v$$

$$\frac{\partial v \omega}{\partial \xi} = \frac{\partial v}{\partial t} + \frac{\partial uv}{\partial x} + \frac{\partial v^2}{\partial y} + \frac{\partial \Phi}{\partial y} + l u$$

$$\frac{\partial (1-\xi) \Phi}{\partial \xi} = RT - \Phi$$

$$\frac{\partial (1-\xi) \omega}{\partial \xi} = (1-\xi) \left(\frac{\partial u}{\partial x} + \frac{\partial v}{\partial y} \right) - \omega$$

$$\frac{\partial (1-\xi) \omega T}{\partial \xi} = (1-\xi) \left(\frac{\partial T}{\partial t} + \frac{\partial uT}{\partial x} + \frac{\partial vT}{\partial y} \right) - \omega \left[\frac{RT_c (\gamma - \gamma)}{g} + T \right]$$

where:

$$\xi = 1 - \zeta$$

$$(1) \quad \xi = P/P$$

with the initial conditions given by: $\omega = \frac{1}{RT_c} \left(\frac{\partial \Phi}{\partial t} + u \frac{\partial \Phi}{\partial x} + v \frac{\partial \Phi}{\partial y} \right)$ where $\xi = 0$
 $\omega = 0$ where $\xi = 1$ (2)

A two-level atmosphere was chosen for the development of computational methodology, at 500 and 1000 millibars. Accordingly, $\xi = 0$; $\xi = 1/2$; $\xi = 1$. Application of the method of integral relationships along the vertical coordinate, together with the two equations of the initial conditions yields 7 simplified equations; 3 additional equations accrue from the equations of motion and heat inflow at the ground. After some

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ACC NR: AT5024832

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rearrangements, a closed system of 10 equations was obtained for the ten predicted variables (ϕ, u, v, ω , and T - at levels #1 and #2). The system was rewritten in finite differences and programmed for digital computation in a computer, using a 22 x 26 net of 572 points with a 300 km. step. The initial wind fields were taken in the geostrophic approximation; the non-linear members were smoothed at each step. The developmental computer runs indicated a need for some modifications to increase stability of the computation process. More specifically, certain eigenvalues (those of the ρ_{xx} matrices stemming from the m-level vertical dimension of the atmosphere, with $m=2$ in the present case, Abstractor) entering directly or indirectly into the 10 final equations had to be considered as variable geographical parameters and computed for several subregions; this process was, however, automated as a computer subroutine. Comparison of actual and predicted geopotential maps shows that weather evolution and the character of basic pressure patterns are correctly predicted. Authors express thanks to I.A. Kibel, member-correspondent of the A.N., SSSR, for his interest in the progress of this work, and to I.V. Trostnikov, for his contribution to computer programming. The orig. art. has 6 figures and 10 equation system formulas.

SUB CODE: 04 SUBM DATH: 00/...65 ORIG REP: 006 OTH REP: 000

Card 3/3 BK

ZAKHARIEV, Z.; IVANOV, P.; KOSTOV, S.

Breeding calves in semienclosed barns during winter. p. 113.

IZVESTIIA. Sofia, Bulgaria, Vol. 10, 1959.

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February, 1960. Uncl.

ZAKHARIEV, Z.
"Feeding the buffalo calf" (p. 19) KOOPERATIVNO ZEMEDELIE
(Ministerstvo na zemedelieto) Sofiya Vol 8 No 8 1953

SO: East European Accessions list Vol 2 No 7 Aug 1954

ZAKHARIEVA, A.

"Work of the zoology club" (p. 23) PRIRODA I ZMANIS
(Bulgarsko prirodoizpitatelno druzhestvo) Sofiya Vol 7 No 1 Jan 1954

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ILKOV, V.; ZAKHARIEVA, I.

A method of discerning methylparathion from ethylparathion and
determining their residual quantities in vegetable products.
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ZAKHARIEV, Z. A.

Ciliary and somatic agglutination in Vidal's reaction for typhoid fever. *Sovrem. med.*, Sofia 4 no.9:68-75 1953. (DML 25:5)

1. Of the District Sanitary and Epidemiological Station, Burgas.

ZAKHARIEV, Z. A.

Weil-Felix reaction in Marseilles fever. *Suvrem. med.*, Sofia
7 no.9:75-78 1956.

1. Iz Okrushnata sanepidstantsia - Burgas (Gl. lekar: K. Kalchev).
(RICKETTSIAL DISEASES, diag.
Weil-Felix reaction in Marseilles fever).

ZAKHARIEVA, An.

Repetition of the lessons on biology in the 9th and 10th grades.
Biol i khim 4 no.2:39-43 '62.

ZAKHARIEVA, A., starshi prepodavatel

Pedagogic lectures on biology. Biol i khim 6 no.5:59-60 '63.

1. SDU.

ZAKHARIEVA, A.; KOZLEVA, P.

Conference of the Biologic Society, Branch of School Biology,
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60-62 '64.

ZAKHARIEVA, A., st. prepodavatel

Teaching aesthetics through biology. Biol i khim 6 no.6:
19-24 '63.

ZAKHARIEVA, A., prepodavatelka

Studying some subjects of chord animals type. Biolog i khim no.6:
37-43 '61.

1. Stolichno durshavno uchilishte.

ZAKHARIEVA, A., st. prepodavatel

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36-41 '63.

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ZARHARIEVA, B. and KEREMIDCHIEV, M.

"Root Insects, Diseases and Pests in the Forest Shelterbelts in Dobruja and how to Fight Them." p.225
(GORSKO STOPANSTVO Vol. 9, no. 5, May 1953 Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 9,
Oct. 1953, Uncl.

ZAKHARIEVA, Bloana, st. nauch. sutrudnik

The mossy bug (*Epicomotis hirta* Poda), a pest of fruit trees
and farm crops. Priroda Bulg 13 no.5:87-88 S-0 '64.

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No. 4, 1958.

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Congress, Volume 8, No. 8, August 1959.

Unclassified

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Determination of blood sugar with glucose oxidase. *Sov. med.*
14 no.9:36-42 '63.

(BLOOD SUGAR) (GLUCOSE OXIDASE)
(ENZYME TESTS) (DIABETES MELLITUS)
(BLOOD CHEMICAL ANALYSIS)

ZAKHARIEVA, V. (Sofia) ; POPOV, B. (Sofia)

Teaching on the theme "Thermoelectric Current." *Vat*
i fiz Bulg 7 no.5:29-30 '64.

ZAKHARIEVA, V. (Sofia)

The experiment "Measuring the resistance of conductors" for the improvement of laboratory work. Mat i fis Bulg 5 no.5:35-36 8-0 '62.

ZAKHARIEVA-KOVACHEVA, K.

SCIENCE

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SCIENCE

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ZAKHARIEVA-KOVACHEVA, K. The first trilobite from the Ordovician era found in the Iskar River gorge. p. 353.

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ZAKHARIEVA-STOILLOVA, B.

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melolontha L. (Fam. Scarabaeidae, Subfam. Melolonthinae).
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ZAKHARIEVA-STOILOVA, B.

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a new species for the fauna of Bulgaria and Europe. Izv
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ZANHARIEVA-STOILOVA, B.

Morphologic characteristics of *Arsoplia syriaca* Burmeister of
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Izv Zool inst BAN no.13:143-145 '63.

ZAKHARIEVA-STOILOVA, B.

"Studies of the genus Anisoplia, Family Scarabaeidae (Coleopt.) in Bulgaria. p. 335"
(IZVESTIIA) No. 1, 1951, Sofiya, Bulgaria

SO: Monthly List of East Europeans Accessions, L. C., Vol. 2, No. 11, Nov. 1953, uncl.

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Action of proline on the amineacetic acid and albumins of sunflower.
Rev chimie 6 no.1:67-72 '61.

1. Institut Biokhimii Akademii SSSR. 2. Deystvitel'nyy chlen Akademii
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SIDEL'NIKOVA, Z., red.; NEMYTOV, V., tekhn.red.

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S.S., tekhn. red.

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basin of the U.S.S.R., 1930-1940] Deiatel'nost' KPSS po sozdaniu
tret'ei ugol'noi bazy SSSR, 1930-1940. Moskva, Vysshaya shkola,
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Areas of using pneumatic energy in coal mines. Ugol' 39 no.2:3-5
F '64. (MIRA 17:3)

1. Institut gronogo dela im. A.A.Skochinskogo (for Gerchikov).

ZAKHARIKOV, G.M., inzh.

Calculation of a hydraulic elevator. Izv.vys.ucheb.zav.; gor.zhur.
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1. Institut gornogo dela imeri A.A.Skochinskogo. Rekomendovana laboratoriyey gornoy mekhaniki.

ZAKHARIKOV, N.A.

The burning process in flameless burner ducts
Soviet Source: "RABOTA I KONSTRUKTSIYA GAZOVYKH PECHET" (Operation and Construction
of Gas Ovens), Academy of Sciences, Ukrainian SSR, 1953, p. 5.

ZAKHARIKOV, N.A.

Increasing the productiveness of ovens for firing glass melting vessels and increasing their quality

Soviet Source: "RABOTA I KONSTRUKTSIYA GAZOVYKH PECHEI" (Operation and Construction of Gas Ovens), Academy of Sciences, Ukrainian SSR, 1955, p.44.

ZAKHARIKOV, N.A., kandidat tekhnicheskikh nauk; BLOKH, S.A., inzhener.

Increasing the productivity of glass pot annealing furnaces and
improving their quality. Trudy Inst. isp. gaze AN URSR 1:44-56 '53.
(Glass manufacture) (Furnaces) (MLRA 9:6)

ZAKHARINOV, N.A., kandidat tekhnicheskikh nauk; BLOKH, S.A., inzhener.

Design analysis and performance data on glass pot annealing furnaces
using recirculated combustion products. Trudy Inst. isp. gaze AN URSS
1:57-68 '53. (MLRA 9:6)
(Furnaces) (Glass manufacture)

ZAKHARIKOV, N.A.

Heat exchange in Martin furnaces. Izv. Inst. Chern. Met. AN URSR
7:114-128 '53. (MLBA 8:5)
(Open-hearth process)

ZAKHARIKOV, N. A.

B. T. R.
Vol. 3 No. 3
March 1954
Ceramics and
Concrete.

2931* Investigation of Cooling Sheet Glass in the Vertical Drawing Machine. (Russian) N. A. Zakharikov and M. I. Korobko. *Steklo i Keramika*, v. 10, no. 7, July 1953, p. 3-8. Influence of various factors on cooling the sheet in a chamber under the machine and in the pit was studied. Tables, graphs.

KHARINOV, H. A.

Journal of the American
Ceramic Society
July 1954
Glass

Cooling of sheet glass in the drawing chamber. N. A. ZAKHARINOV. *Steklo i Keram.*, 10 [8] 12-17 (1953). —Z. analyzes the effect of different factors on the cooling of sheet glass in a drawing chamber with and without a debiteuse. (1) With debiteuse: Heat balance is expressed by $(\sigma T_0^4 L)/(C\gamma W\delta) = \phi(m_2) - \phi(m_1)$, where L is height of drawing chamber in m., W is pickup in m./hr., δ is thickness of sheet in m., C is heat capacity of glass in kcal./kg. degree, γ is bulk density of glass in kg./m.³, and T_0 is temperature of outside surface of cooler in °K.; $m_1 = T_0''/T_0$ and $m_2 = T_0'/T_0$, where T_0' is temperature of glass melt at bulb edge of sheet in °K. (measured by optical pyrometer) and T_0'' is temperature of sheet at end of chamber in °K.; $\phi(m) = \arctan m - 1/2 \ln(m-1/m+1)$; σ is visible coefficient of radiation and $\sigma \approx 4.46 \times 10^{-4} [2 - (1/L)] (1/L)$ kcal./m.² hr. °K.⁴, where 1 is the height of the cooler in m. Calculation of the cooling of a sheet is carried out. (2) Without debiteuse: Heat balance is expressed by $[4(\sigma_1 + \sigma_2) A^2 L]/(C\gamma W\delta) = \phi(m_2) - \phi(m_1)$, where $A = \sqrt{(\sigma_1 T_0^4 + \sigma_2 T_0'^4)/(\sigma_1 + \sigma_2)}$, where T_0' is the temperature of the open surface of the glass melt in °K., $m_1 = T_0''/A$, $m_2 = T_0'/A$, and σ_1 and σ_2 are visible coefficients of radiation. Since $\sigma_1 T_0^4$ is small compared with $\sigma_2 T_0'^4$, then $A \approx T_0' \sqrt{\sigma_2/(\sigma_1 + \sigma_2)}$. Calculations were found to agree closely with experimental results. It is impossible to determine the temperature of the sheet along the height of the chamber as the mathematical equations become unwieldy and unsuitable for practical calculations. B.Z.K.

ZAKHARIKOV, N. A.

Trampers from the vertical shaft of a diesel fuel delivery machine

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ZAKHARIKOV, N.A., kandidat tekhnicheskikh nauk; PIORO, L.S., inzhener.

Study of heat exchange in glass furnaces. Trudy Inst. isp.
gaza AN URSS 2:17-32 '54. (MLBA 9:10)

(Glass manufacture) (Heat--Transmission)

ZAKHARIKOV, N.A., kandidat tekhnicheskikh nauk; BLOKH, S.A., inzhener.

Thermal stresses in sheet glass and glass tubes. Trudy Inst.
isp. stakla AN URSS 2:64-82 '54. (MLRA 9:10)

(Glass manufacture) (Thermal analysis) (Strains and stresses)

ZACHARIKOV, N.A., kandidat tekhnicheskikh nauk.

Heat exchange and annealing during the vertical drawing of
sheet glass. Trudy Inst. isp. staza AN URSSR 2:83-124 '54. (MLRA 9:10)

(Glass manufacture) (Heat--Transmission)

ZAKHARIKOV, N.A.

HC/R Miscellaneous - Glass drawing

Card 1.1 Sub. 104 - 3, 1

Authors : Zakharikov, N. A.

Title : The peculiarities of the heat techniques in the potless method of drawing glass

Periodical : Stek. i ker. 11/12, 9-11, Dec 1954

Abstract : The requirements for the control of the heat techniques in glass drawing are stated. Directions are given for the construction of a glass-drawing machine in a way to insure that these requirements are satisfied. This is partially obtained by placing screens to reflect the heat in such a way as to keep the surface from cooling faster than the other parts, with the cooling effected at the desired stage by a blower. Four Russian references: 1948

Institution : ...

Submitted : ...

ZAKHARIKOV, N.A.

Effect of irregular temperatures in gas flow on the radiant heat exchange in furnaces. Vop.proizv.stali no.3:54-73 '56. (MLRA 9:11)
(Gas flow) (Heat--Radiation and absorption)

ZAKHARIKOV, N.A.; MAZAYEVA, O.L.

Height of the combustion chamber in glass furnaces. Stek. 1
ker. 14 no.9:6-12 S '57. (MIRA 10:10)

1. Institut ispol'zovaniya gaza AN USSR.
(Glass furnaces)

ZAKHARIKOV, N. A., (Cand. Tech. Sci.)

"Heat Transfer in Industrial Furnaces Depending Upon Conditions of Gas Combustion"

(Theory and Practice of Gas Combustion; Transactions of a Scientific and Technical Meeting) Leningrad, Gostoptekhizdat, 1958. 343 p.

The Increase of the Luminescence and Enrichment of the Torch in Glass Smelting Furnaces. 72-1-2/13

of liquid fuel is suggested, by which also the luminescence of the torch is increased. As liquid fuels petroleum spirit and, where peat and pit coal with gas purification are used, peat- and pit coal tar should be used, which leads to a saving of gas of 12 - 15 %, and, in addition, to an increase of the luminescence of the torch. At the institute for the utilization of gas the method as well as the necessary equipment for the combustion of liquid fuels was worked out (figure 1). The liquid fuel is atomized by steam of 3 - 4 atm. excess pressure. Figure 2 shows the influence exercised by the consumption of vapor and of temperature of the blast furnace gas upon the relative output of sooty carbon, which was proved by A. V. Kavaderov in his paper (reference 1). Various experiments carried out with liquid additional fuel are then described. Figure 3 shows the modification of the heat current impinging upon the continuous glass melting furnace in dependence on the ratio between the consumption of petroleum spirit and that of gas. The same results were obtained also by A. V. Kavaderov (reference 1). Furthermore, experiments undertaken for the investigation of the influence of torch luminescence upon the operation of the furnace are described. Figure 4 shows the dependence of the saving of gas on the consumption of petroleum spirit. Experiments were further carried out with a view of

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investigating the possibility of a luminescent torch. The results obtained are shown in a table. Experiments carried out with enrichment of the peat gas torch by petroleum spirit have been carried out in the Bykovskiy glass works (Zhitomir district). Also V. P. Kononko participated in these experiments. (reference 1). For the preparation and the supply of the petroleum spirit and tar a scheme was developed and tested (see figure 5). The operation of such an installation is then described. Such installation ought to be fitted in all plants, in which work is carried out with purified gas made of anthracite or peat and pit coal, in which case tar or petroleum spirit should be used as additional liquid fuel. When heating with unpurified gas produced from pit coal such an installation is not advisable. There are 5 figures, 1 table, and 9 references, 6 of which are Slav.

ASSOCIATION: Institute for the Utilization of Gas AN Ukrainian SSR (Institut ispol'zovaniya gaza AN USSR).
AVAILABLE: Library of Congress.
Card 3/3

AUTHORS: Zakharikov, N. A., Pioro, L. S., Demidovich, 72-58-3-2/15
B. K., Zaliznyak, D. V.

TITLE: The Annealing of Glass Tubes (Otzhig steklyannykh trub)

PERIODICAL: Steklo i Keramika, 1958, Nr 3, pp. 5-8 (USSR)

ABSTRACT: It was experimentally proved that with drawing of tubes of 50 mm diameter from ordinary glass (of the type of window-glass) at a speed of 70 to 75 m per hour, the residual stresses amount to 20 to 50 mp/cm per 1 mm of the tube-wall thickness after cooling in the engine shaft. With drawing of the same tubes from glass poor in alkali, at a speed of 90 to 95 m per hour, the residual stresses attain 30 to 70 mp/cm per 1 mm thickness of the tube-wall. The velocity of drawing of tubes of 50 mm diameter amounts to 90 to 100 of running meters per hour. The output of the engine could be increased if it would be possible to achieve the first annealing of the tubes in the engine-shaft and to carry out the subsequent annealing in special plants. The subsequent annealing is at present carried out in a furnace the capacity of which is smaller than that of the engines, so

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The Annealing of Glass Tubes

72-58-3-2/15

that part of the current tube-production remains unannealed on stock in the glassworks at Gome¹. Tests were carried out with a gas annealing furnace which was developed with the assistance of G. F. Martynuk and I. A. Shilov and which operated according to a principle which is different from the existing one. In this furnace, the glass-tubes are simultaneously heated both from inside and outside by means of blowing by combustion gases, by which the efficiency of the annealing-process increases, as well as the quality of the tubes, due to a more uniform heating. A formula with a coefficient K which depends on the diameter and on the lengths of the tubes, as well as on the velocity of combustion gases is given for the computation of temperature, as may be seen from figure 1. This furnace is represented in figure 1 and is designed for the operation of 2 mechanical equipments. Further, the construction and the operation of the furnace are fully described. The glass-tubes are vertically located in a container and conveyed into the chambers of the furnace by means of trucks. The furnace has 4 chambers and the annealing scheme is divided into 4 equal periods. This furnace has been in operation for a period of 11 months during which 72 kilometers of tubes were annealed.

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The Annealing of Glass Tubes

72-58-3-2/15

The measured values of the residual stresses are given in table 2. The temperatures of the combustion gases at the input and output of the sets of tubes are given in figure 2. There are 2 figures and 2 tables.

ASSOCIATION: Institut ispol'zovaniya gaza AN USSR
(Institute for Gas-Utilization AS Ukrainian SSR)
Gomel'skiy stekol'nyy zavod (Gomel' Glassworks)

1. Glass tubing--Heat treatment

Card 3/3

AUTHORS: Zakharikov, N. A., Blokh, S. A., Sen', Z. F., SOV/72-58-9-9/2c
Lesovoy, N. V., Yarmak, O. F.

TITLE: Non-Recurrent Baking of Porcelain (Skorostnoy odnokratnyy obzhig farfora)

PERIODICAL: Steklo i keramika, 1958, ¹⁵ Nr 9, pp 20 - 24 (USSR)

ABSTRACT: This is an investigation of the influence of the rate of heating of the products upon their quality, if they are baked by a non-recurrent process without casing. The tests were carried out with porcelain cups, sizes B-53 and "Kiyevskaya". The ingredients of the batch are given in table 1 and the results for the chemical analysis (in percent) are given in table 2. The molecular formula for the batch is also presented. For increasing the mechanical strength of the semi-finished porcelain product 0.3% of carboxy-methyl cellulose were added to the batch. 0.2% of fluid glass and 0.1% of soda were used in the preparation of the electrolyte. The porcelain cups were cast in plaster molds so fashioned to give a wall strength of 1,5-2,5 mm. Moisture is driven off to

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Non-Recurrent Baking of Porcelain¹

SOV/72-58-9-9/26

a content of 1% under natural conditions. The ware is then glazed with a O-45VZPA hand operated atomizer. The raw materials for the glaze are listed in table 1, their chemical analysis is detailed in table 2. The molecular formula of the glaze is also given. The glazed cups were dried to a humidity of 0,5% and then baked in the laboratory furnace (Fig 1). The maximum temperature in the furnace was 1320°. The cups were placed on the bottom of the furnace without a casing and were cooled according to a schedule specified by the diagram in figure 2. The heating and baking period at this temperature varied between 2-5 hours. Data concerning the baking conditions are presented in table 3. The degree of whiteness of the body was determined by means of a FM1 photometer, whereas the water absorption and the heat resistance of the test products was checked according to GOST 7591-55. The best whiteness was obtained with combustion gases with a CO content of 3-4% (Fig 3). The rate of heating varied between 60 and 300° per hour. At this rate the quality of the products obtained is by no means inferior

Card 2/4

Non-Recurrent Baking of Porcelain

SOV/72-56-9-9/20

to that of the products from the Baranovka and Kiyev Works. Their water absorption does not exceed 0,39% . The specimens corresponded to the requirements imposed upon them in the checking of thermal and chemical resistivity. The glaze also exhibited a customary quality. Investigations of the microstructure of the body were carried out with a MP-3 microscope and X-ray structural analyses were made on the URS-70 instrument. In table 4 the structures of customary and of test products are portrayed. As can be seen they do not differ at all. Figures 4 to 8 contain micrographs of polished porcelain sections made after different baking periods. They do not indicate any essential variations in structure. The duration of baking is therefore not determined by the physical and chemical transformations in the porcelain but only by the heating facilities of the furnaces. The cooling process has hitherto not been the object of minute research. Preliminary experiments showed that a cooling of porcelain cups from 1320° to 100° is possible within 8 - 10 minutes without impairing the quality of the product. The experiments showed that a non-recurrent burning without casing

Card 3/4

Non-Recurrent Baking of Porcelain

SOV/72-58-9-9/20

of porcelain products in short automatic continuous
car tunnel furnaces is possible. There are 8 figures and
4 tables.

ASSOCIATION: Institut ispel'zovaniya gaza AN Ukrainskoy SSR (Institute of
Gas Utilization AS Ukr SSR)
Nauchno-issledovatel'skaya laboratoriya Kiyevskogo
sovnarkhoza (Scientific Research Institute of the Kiyev
Council of National Economy)

Card 4/4

ZAKHARIKOV, N.A.; NAYDENOV, V.V.; BLOKH, S.A.; SOLDATOV, G.A.; LEVITSKIY,
V.K.; KUZNETSOV, V.V.; SPEKTOR, M.P.

Radiation gas drying of structural ceramic products. Stak. 1
ker. 19 no.7:21-25 J1 '62. (MIRA 15:7)
(Tiles--Drying)

ZAKHARIKOV, N.A. [deceased], doktor tekhn.nauk; PIORO, L.S.,
kand.tekhn.nauk; BABICH, V.I., inzh.; TESSEL'SKIY, G.A.,
inzh.; NIKOLAYEV, Ye.K., inzh.; OBLIVAL'NIY, F.A., inzh.;
VAYNSHTEYN, A.L., inzh.; LUSHIN, L.A., inzh.

New device for the control of gas combustion in glass tank
furnaces. Stek. i ker.21 no.9:5-6 S '64 (MIRA 18:4

1. Institut gaza AN UkrSSR (for Zakharikov, Pioro, Babich,
Tessel'skiy, Nikolayev. 2. Lisichanskiy stekol'nyy zavod
(for Oblival'nyy, Vaynshteyn, Lushin).

ZAKHARIKOV, N.A., doktor tekhn.nauk; KONONKO, V.P.

Checking the fritting of sheet glass. Stek.i ker. 19 no.12:1-3
D '62. (MIRA 16:1)

1. Institut ispol'zovaniya gaza AN UkrSSR.
(Glass-Testing)

ZAKHARIKOV, Nikolay Andreyevich. Prinimal uchastiye ROZHANSKIY, A. I.;
YAROTSKIY, V. D., red.; STARODUB, T. A., tekhn. red.

[Heat-exchange processes in glass furnaces] Teploobmennyye
protssy v steklovarenykh pechakh. Kiev, Gostekhnizdat
USSR, 1962. 246 p. (MIRA 16:4)
(Glass furnaces) (Heat--Transmission)

ZAKHARIKOV, N.A., doktor tekhn.nauk; BLOKH, S.A.

Rapid drying of porcelain. Stek. i ker. 18 no.11:25-28 N '61.
(MIRA 15:3)

(Drying apparatus) (Porcelain)

ZAKHARIKOV, N.A.; KONONKO, V.P.

Heat transfer in furnaces with luminous and nonluminous flames. Gaz.
prom. 6 no.11:22-27 '61. (MIRA 15:1)
(Furnaces) (Gas, Natural) (Heat--Transmission)

ZAKHARIKOV, N.A.; ROZHANSKIY, A.I.; SUKHOVEY, V.A.

Evaporative cooling of basin walls of pot furnaces. Stek.i ker.
18 no.9:7-12 S '61. (MIRA 14:10)
(Glass furnaces)

ZAKHARIKOV, N.A.; LESOVOY, N.V.; MITIN, N.G.; PIORO, L.S.

Calcinating porcelain in a gas bleaching medium. Stek. 1 ker.
18 no.2:15-19 F '61. (MIRA 14:3)
(Porcelain)

ZAKHARIKOV, N.A.; ROZHANSKIY, A.I.

Heat transmission through the tank walls of a glass melting furnace.
Stek.l ker. 17 no.3:1-9 Mr '60. (MIRA 13:6)
(Glass furnaces)
(Heat--Transmission)

ZAKHARIKOV, N. A., Doc Tech Sci -- (diss) "Heat exchange processes in glass furnaces." Kiev, 1960. 23 pp with graphs; (Ministry of Higher and Secondary Specialist Education USSR, Moscow Order of Lenin Chemical Technology Inst im D. I. Mendeleyev); 150 copies; price not given; list of author's work on pp 22-23 (19 entries); (KL, 22-60, 135)

ZAKHARIKOV, N.A.; MAZAYEVA, O.L.

Investigating by experiments the heat transfer in industrial
furnaces. Trudy Inst. isp. gaza AN URSS no.5:3-23 '58. (MIRA 11:12)
(Glass furnaces) (Heat--Transmission)

ZAKHARIEV, N.A.; PIORO, L.S.; NOVIKOV, L.S.; FATEYEV, F.G.; MAZAYEVA, O.L.

Burning natural gas in glass furnaces. Trudy Inst. isp. gaza AN
URSR no.5:24-43 '58. (MIRA 11:12)
(Glass furnaces) (Gas as fuel) (Gas, Natural)

ZAKHARIKOV, H.A.

Calculating heat exchanges in glass furnaces with sectional
regenerators. Trudy Inst. isp. gaza AN URSR no.5:44-67 '58.
(MIRA 11:12)

(Heat--Transmission) (Glass furnaces)

ROZHANSKIY, A.I.; BLOKH, S.A.; ZAKHARIKOV, N.A.

Carburizing the gas torch in glass furnaces. Trudy Inst. isp. gaza
AN URSR no.5:68-76 '58. (MIRA 11:12)
(Glass furnaces) (Gas torches)

TAUBE, Petr Reyngol'dovich; RUDENKO, Yevgeniy Ivanovich; ZAKHARIKOVA,
Ye.I., red.; YEZHOVA, L.L., tekhn. red.

[From hydrogen to nobelium?] Ot vodoroda do ... nobelija?
Moskva, Gos. izd-vo "Vysshaya shkola," 1961. 329 p.
(MIRA 15:3)

(Chemical elements)

ZAKHARIN, A.

Cotton combine built of precast reinforced concrete. Na stroi.Ros.
no.3:16-18 Mr '61. (MIRA 14:6)

1. Glavnyy inzhener Gosudarstvennogo proyektuogo instituta No.1
pri Vserossiyskom Sovete narodnogo khozyaystva.
(Kamyshin—Textile factories) (Precast concrete construction)

ZAKHARIN, A.

Let's use electricity wisely and economically. Sov.torg.
33 no.3:31-33 Nr '60. (MIRA 13:6)
(Moscow--Store, Retail--Lighting)

ZAKHAR'IN, A.

Progress in production organization. *Fizh.del* 7 no.11:13 N°61.
(MIRA 14:11)

1. Glavnyy inzh. Kirovskogo zavoda, g. Leningrad.
(Leningrad--Metallurgical plants--Fires and fire prevention)

ZAKHAR'IN, A., inzh., laureat Gosudarstvennoy premii

What kind of person should he be? NTO 7 no.3:33-34 Mr '65.

(MIRA 18:5)

ZAKHARIN, A. D.

PA 153742

USSR/Engineering - Power Plants, Electric
Power Plants, Hydroelectric Nov 49

"Principles for Incorporating Rural Electric Power
Stations into Local Systems," A. D. Zakharin, Dr
Tech Sci, Power Eng Inst Imeni Krzhizhanovskiy, Acad
Sci USSR, 7 1/2 pp

"Elektrichestvo" No 11

Presents brief digest of investigation carried out
in author's institute of scientific principles in-
volved in local electric power systems. Explains
calculation of structural and power parameters for
systems where hydroelectric power stations

153742

USSR/Engineering - Power Plants, Electric Nov 49
(Contd)

predominate, and characteristics of systems loaded
by electric motors of commensurate power. Includes
eight diagrams.

153742

VELIKORETSKIY, Oleg Abramovich; ZAKHARIN, Aleksandr Davydovich; LYUDSKOV,
B.P., red.; BRODSKIY, M.F., tekhn. red.

[Lighting for stores] Osveshchenie magazinov. Moskva, Gos. izd-vo
torg.lit-ry, 1961. 71 p. (MIRA 14:11)
(Stores, Retail--Lighting)

ZAKHAR'IN, A.F., inzh.

Study of the thermophysical properties of Donets Basin rocks.
Trudy Sem.po gor.teplotekh. no.4:80-84 '62. (MIRA 15:8)

1. Trest "Artemuglegeologiya".
(Donets Basin--Rocks--Thermal properties)

3(5)

PHASE I BOOK EXPLOITATION

SO./3055

Kashpur, Yakov Nikolayevich and Anatoliy Fedorovich Zakhar'in

Geotermicheskiye usloviya Yugo-Zapadnoy chasti Donbassa (Geothermal Conditions of the Southwestern Part of the Donets Basin) Moscow, Ugletekhizdat, 1958. 114 p. 1,500 copies printed.

Ed. of Publishing House: G. M. Il'inskaya.

PURPOSE: This book is intended for engineering and technical personnel engaged in the survey, exploitation, and development of coal deposits.

COVERAGE: This book examines the techniques of making geothermal measurements in the Donbass and the results of such investigations. Chief attention is given to the study of temperature change as a function of depth, the study of the geothermal regime in deep horizons, and the factors which control it. A diagram is included showing the characteristics of the geothermal regime of a coal field. The geothermal regime of the Donbass and adjacent regions is compared with certain European deposits. Professor Dakhnov and Doctor of Technical Sciences A. N. Shcherban' aided in processing field observations. The author thanks Academician A. A. Skochinskiy and Professor G. D. Lidin. Chapters I, III - VI were written by Ya. N. Kashpur and Chapter II by A. F. Zakhar'in. There are 73 Soviet references.

Card 1/3

Geothermal Conditions (Cont.)

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Card 2/3

KASHPUR, Yakov Nikolayevich; ZAKHAR'IN, Anatolii Fedorovich; SLAVOROSOV,
A.Kh., red. izd-va; IL'INSKAYA, G.N., tekhn. red.

[Geothermal conditions of the southwestern part of the Donets
Basin] Geotermicheskie uslovia iugo-zapadnoi chasti Donbassa.
Moskva, Ugletekhnizdat, 1958. 114 p. (MIRA 11:10)
(Donets Basin—Earth temperature)

BUDZKO, Igor' Aleksandrovich, doktor tekhn. nauk, prof., akad.; ZAKHARIN, Andrey Georgiyevich, doktor tekhn. nauk; EBIN, Lev Yefimovich, doktor tekhn. nauk, prof.; KANAKIN, N.S., inzh.; LEVIN, M.S., kand. tekhn. nauk; YAKOBS, A.I., kand. tekhn. nauk; GROYS, Ye.S., inzh.; ZUL', N.M., kand. tekhn. nauk; POYARKOV, K.M., kand. tekhn. nauk; MURADYAN, A.Ye., kand. tekhn. nauk; KRAUSP, V.R., kand. tekhn. nauk; SHATS, Ye.L., kand. tekhn. nauk; IOKHVIDOV, E.S., red.; BUL'DYAYEV, N.A., tekhn. red.

[Rural electric power distribution networks] Sel'skie elektricheskie seti. Moskva, Gosenergoizdat, 1963. 262 p.

(MIRA 16:5)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Budzko).

(Rural electrification) (Electric power distribution)

POTHOV, V.I.; ZAKHARIN, A.G.; MARKOVICH, I.M.; TOLSTOV, Yu.G.;
GUREVICH, B.A.; BRACHNEVSKIY, N.N.; LEBEDEV, M.M.;
MIRZHAYLOV, V.I.; DENISOV, V.I.; MOSKVITIN, A.I.;
ISYEROVICH, B.A.; TELECHEV, B.A.; STEKOL'NIKOV, I.S.;
LAPITSKIY, V.I.; KHELYSTER, I.N.

Veniamin Isaakovich Veits; obituary. Elektrichestvo no.4:
91-92 Ap '61. (MIRA 14:4)
(Veits, Veniamin Isaakovich, 1905-1961)

ZAKHARIN, A. G.

"Certain problems of electric power supply for agricultural regions", by
Candidate of Agricultural Sciences A. G. Zakharin, at the Power Engr. Inst.
in KRZHIZHANGVSKIY of the Acad. Scs. USSR.

SO: Elektrichestvo, No 5, Moscow, May 1947 (U-5533)

ZAKHARIN, A. G.

At the plenary meeting of the conference of the Power Establishments of the Academies of Science of the Union Republics and of the Affiliates of the Academy of Science, USSR, the following paper was presented by co-workers of the Power Institute of the Academy of Science, USSR, Candidate of Agricultural Sciences, A. G. Zakharin, on "Local power-engineering systems in agricultural regions", and

SO: Elektrichestvo, No. 9, Moscow, Sept. 1947 (U-5534)

ZAKHARIN, A. G.

Dr. Tech. Sci.

"A Local Electric Power System for Agricultural Regions," Iz. Ak. Nauk SSSR,
Otdel. Tekh. Nauk, No.12, 1949

Energetics Inst. im. Krzhishanovskiy, AS USSR

ZAKHARIN, A. G.

USSR/Electricity - Electrical Networks
Standard, Voltage

May 50

"On the Draft of a Standard for Nominal Voltages of Stationary Electrical Networks,"
Prof M. A. Shatelen, Corr Mem, Acad Sci USSR, Leningrad Polytech Inst imeni Kalinin;
V. N. Antonov, Engr, Min of Light Ind USSR; N. N. Krachkovskiy, Cand Tech Sci, Hidroelektro-
proyekt; A. G. Zakharin, Dr Tech Sci, Power Eng Inst imeni Krzhizhanovskiy, Acad Sci
USSR; L. Ye. Ebin, Cand Tech Sci, All-Union Inst for Electrification of Agr; K. Ye.
Bulgakov, Engr, "Elektroapparat" Plant; A. I. Gershengorn, Engr, TsNIEE, Min of Elec Power
Plants USSR

"Elektrichestvo" No 5, pp 78-83

Presents criticisms of and suggestions for subject draft standard [See ~~W-1307~~h7]

PA 167T16

ZAKHARIN, A.G.

USSR/Electricity - Electrification, Farm - Sep 50

"A Local Electric Power System for Farm Regions,"
A. G. Zakharin, Dr Tech Sci, N. A. Karulov, Cand
Tech Sci

"Vest Ak Nauk SSSR" No 9, pp 13-25

Describes advantages of local elec power systems,
in which groups of rural hydroelec and steam-
elec power stations are joined by a common distri-
bution network. Discusses various types of local
power systems. The basic research work in this
field is being conducted at the Power Eng Inst,
Acad Sci USSR, under the scientific direction of
V. I. Veyts, Corr Mem Acad Sci USSR.

219715

USSR/Electricity - Hydroelectric Power

Station Farm Electrification

Oct 52

"Electrification of the Irrigated Regions Around the Great Construction Projects," Corr Mem Acad Sci USSR, V. I. Veyts, Dr Tech Sci A. G. Zakharin

"Vest Akad Nauk SSSR" No 10, pp 63-79

Three-and-a-half billion kw-h per yr of the output of the Stalingrad and Kuybyshev hydroelectric stas are to be used for irrigation and electrification of regions around plants. Discusses at length the interconnection of power and irrigation, elec machine-tractor

239744

stas as the leading elec center in irrigated regions, distribution of elec power in irrigated regions, and use of local power resources.

239744

ZAKHARIN, A. G.

USSR/Agriculture

Card 1/1

FD 268

Author : Zakharin, A. G.

Title : Scientific problems of electrification of agriculture in the U.S.S.R.

Periodical : Iz. Ak. Nauk SSSR, OTN, 1, 61-68, Jan 1954

Abstract : Discusses electrification of agricultural processes as a means of increasing production. Includes expansion and improvement of electrical power supply of agricultural regions, and development of methods and technical means for most effective electrification of production. Summarizes present state and results of scientific research in field of electrification of agriculture and gives short description of problems to be solved.

Institution :

Submitted : December 21, 1953. Presented by V. I. Veyts, Corresponding Member of the Academy of Sciences of the U.S.S.R.

ZAKHARIN, A.G.

GANBLIN, A.M.; ZAKHARIN, A.G.; LEVIN, M.S.

New aluminum steel wire for rural electric lines. *Bul. nauch.-tekh.*
inform. po elek. sal'khoz. no.1:47-50 '56. (MLBA 10:9)
(Electric wire)

ZAKHARIN, A.G., doktor tekhnicheskikh nauk.

Lenin's legacy in carried into effect. Nauka i pered. op. v sel'khoz.
6 no.11:5-7 N '56. (MIRA 10:1)

(Rural electrification)